Midterm Evaluation Report
Child Survival IX
Save the Children-Honduras

Contract No. FAO-0500-A-00-3026

(translatedfrom a Spanish original)

August 1995

Save the Children
54 Wilton Road, Westport, CT 06880
Phone: (203) 22 l-4000
Fax: (203) 222-9 176

Save the Children-Honduras
A.P. 333, Tegucigalpa, Honduras
Phone: (504) 3 l-09-58
Fax: (504) 32-08-80

BASICS
A USAID financed project administered by the Partnership for Child Health Care, Inc.
Partners: Academy for Educational Development (AED), John Snow, Inc. (JSI)
and Management Sciences for Health (MSH)
1600 Wilson Boulevard, Suite 300, Arlington, VA 22209 USA
Phone: 703-3 12-6800 Fax: 703-3 12-6900

ACKNOWLEDGMENTS

The evaluation team is grateful to all the community staff of the Save the Children Association of Honduras who participated with their time and dedication to this evaluation. We hope that some recommendations have been identified which will assist them in their noble work in helping the children of Honduras.

ACRONYMS

ARI	Acute Respiratory Infection
ASCH	Save the Children Association of Honduras
CDD	Control of Diarrhea1 Disease
CESAMO	Health Center with Doctor
CESAR	Rural Health Center
CHV	Community Health Volunteer
c s	Child Survival
CSSP	Child Survival Support Program
DIP	Detailed Implementation Plan
IDC	Integrated Development Committee
KPC	Survey of Knowledge, Practices and Coverage
MSP	Ministry of Public Health
ORS	Oral Rehydration Salts
SC	Save the Children-Central Office
SCM	Standardized Case Management

CONTENTS

ANNEXES

EXECUTIVE SUMMARY

This is the midterm evaluation report of the Child Survival IX Project of Save the Children Association of Honduras (ASCH). The team consisted of an evaluation coordinator provided by the BASICS Project, two staff members from the central office of Save the Children in Westport and a team formed by staff from the office of ASCH and from the three impact areas of the project.

Evaluation activities lasted approximately 6 weeks. The outside team (from BASICS and SC) were in the country for two weeks. Before the arrival of the external consultants to Honduras the ASCH team carried out a survey of Knowledge, Practices and Coverage (KPC), and made the necessary logistical and administrative arrangements for the evaluation. Costs of the evaluation were not calculated. The cost of the BASICS consultant was absorbed by the BASICS project. A mixture of quantitative and qualitative methodologies was used. I) Review of documents and archives of ASCH; 2) Survey of Knowledge, Practices and Coverage in the community; 3) Census of the quality of health services; 4) Group and individual interviews; and 4) Presentation of results.

The project has accomplished the majority of its goals of improving knowledge and behaviors in the home -- at least the trends are positive. Important achievements have been attained in maternal health and in almost all aspects of child survival. The principal problems were found in the area of sustainability (transfer of project responsibilities to the community and to the MSP).

The principal recommendations include the need to reduce the number of interventions, and the possible introduction of the WHO/PAHO Integrated Management of the Sick Child initiative to focus the interventions. The gradual phaseout of some interventions such as EPI, with which the MSP has had excellent success are also recommended. It is recommended to further analyze the data obtained through the information system to a deeper level. ASCH has data which can be analyzed to identify patterns, risk factors and to create models to test hypotheses. One critical recommendation is to extend project activities by at least one more year to solidify the work of sustainability with the MSP and with the communities.

The ASCH project offers a number of lessons for Honduras and for other projects in the Latin America region. First, the integrated form of work of the different ASCH projects offers a true model of replicable development in other areas of Honduras and of the region. Once its software problems are corrected, ProMIS can be an important tool for other projects. Experience with the microposts is also valid and replicable in other settings.

The authors of the report are: René Salgado, Karen LeBan, Luis Amtndola, Carmen Weder, Mario Nieto and Mariano Planells. Results of the evaluation were presented to all the area teams of ASCH and during a session with all of the counterpart agencies.

INTRODUCTION

As part of the contractual obligations under the "cooperative agreement" of Child Survival IX No. FAO-0500-A-00-3026, Save the Children-Honduras is required to carry out a midterm evaluation. The objective of this evaluation is to review progress of the project in terms of achieving the goals and objectives of the "cooperative agreement." Also, the evaluation should identify project components which are functioning adequately, suggest areas which require attention and make recommendations to guide the project during the second half of its implementation. This report is the result of this midterm evaluation.

BACKGROUND

The project is implemented in three impact areas: 1) La Esperanza; 2) Tegucigalpa; 2) San Lorenzo. Annex 1 shows the location of these impact areas.

Impact Area: La Esperanza

This impact **area** is located northwest of the capital city, approximately 4 hours away by vehicle. The project is located in 2 1 rural communities and has a supporting office in the city of La Esperanza-Intibuca. The municipalities covered by this project are Yamaranguila, Intibuci, Masaguara and La Esperanza. The population of the communities served is largely made up of Lenca Indians, however the entire population speaks Spanish.

As in the other two impact areas, there is a high level of poverty, ill health and marginality in **the** La Esperanza-Jntibuci area. Illiteracy is reported at 48 %. Housing conditions are especially poor with 98% of homes having earthen floors. Homes usually have one or two bedrooms. The main morbidity and mortality is due to diarrhea1 problems, acute respiratory infections and malnutrition.

ASCH has worked in the outskirts of La Esperanza-Intibuci since the end of the 80's with various health and development projects. As mentioned in the original proposal, it is hoped that the lessons learned in the Child Survival III project can be applied to the new areas of this project. Due to this long-term commitment good relations have been developed with public health services in La Esperanza (1 CESAMO: 3 CESARES; Area Hospital).

Impact Area: Tegucigalpa

This impact area **lies** within the urban shell of the city of Tegucigalpa. Interventions have been planned in five neighborhoods: 1) Villafranca; 2) Alemania; 3) Buenas Nuevas; 4) Villa Cristina; 5) San Juan de1 Norte. All are located at approximately nine kilometers from Tegucigalpa. There is no significant difference among the villages since they all border **on** each other.

The social and health characteristics are typical of urban-marginal neighborhoods surrounding the big cities of Latin America. Perched on hills, very few houses have drinking water, drainage or garbage collection. Consequently, dirty water and garbage freely released into the surroundings produce sources of infection.

Impact area: San Lorenzo

Twenty rural communities and some marginal groups situated within the urban shell of the port city of San Lorenzo have been identified. This region is located in the southern part of the country in the Department of Valle. The region is characterized by a warm, dry climate with high temperatures during most of the year. The rural impact area consists of 9,046 inhabitants plus 3,684 persons in the 15-30 age group considered within the range of the education project in HIV/AIDS in the city of San Lorenzo.

Project Interventions and Strategies

The goal of the project, described in the original proposal, stipulates the following:

> *Maintenance of the reduction of morbidity and mortality in children under 5 years and in fertile women through the strengthening of community groups, training families in behaviors to care for their children, and strengthening health services of the Ministry of Public Health of Honduras.*

To achieve its goal, project directors have designed an integrated health and development project which incorporates the principal maternal-infant health interventions. These include: Maternal Health/Family Planning, Control of Diarrhea1 Disease (CDD), Acute Respiratory Infections (ARI), Expanded Program of Immunization (EPI), Nutrition, Vitamin A, Prevention of transmission of HIV/AIDS and Malaria. The specific objectives of each intervention are listed in the left column of Table 1. In addition, the project integrates into these health interventions a series of other community development interventions such as: Education, Community Banks, Agriculture, Potable Water, etc. The latter interventions are financed with ASCH private funds or funds of other agencies.

The project is based on educating the community and on a subsequent generation of demand for health services. It is assumed that public services can respond adequately to the generated demand. The project reaches the community through the training of a series of volunteer workers. Among these are volunteer health workers (CHVs), auxiliary volunteers, mother-child counselors, micropost volunteers, traditional midwives and volunteers in family planning. As their titles indicate, workers are in charge of one aspect of community health (Annex 12 contains job descriptions for each type of worker). However, the CHVs seems to be the fundamental focal point of the health activities of ASCH in the community. In general, interventions are delivered to the community through home visits and talks on health to organized community groups (Integrated Development Committees, Health Committees, Community Banks, etc.). Also, in some cases, the project produces health programs on a local radio station.

An innovative strategy to deliver services and strengthen sustainability is the implementation of pharmaceutical microposts. With the support of agencies such as UNICEF and PRODIM, the project implements community revolving funds for medicines. This provides community access to basic medications at low cost. The concept is that of a revolving fund which can maintain itself as long as people pay for the medicines obtained.

In the case of HIV/AIDS, in addition to home visits and group talks, the project works with groups of adolescents in the urban areas of Tegucigalpa.

To achieve sustainability, the project forms community groups to supervise the duties of the volunteers and to collaborate with the MSP. These groups, called Integrated Development Committees (IDC) in some communities and Boards ("Patronatos") in others, are chosen by popular election.

METHODOLOGY

Upon reviewing the guidelines for conducting a midterm evaluation, it is clear that no one methodology can respond to all the questions posed. It is also evident that collecting, compiling, analyzing and reporting so much information requires the coordinated effort of a large team of personnel (consultants, interviewers, etc.) for at least one month. Ironically, this takes staff away from their work activities for a significant period of time.

Given the limitations, an evaluation was designed which utilized a mixture of methodologies which enabled a response to the greatest number of questions. Even so, it was impossible to answer all the questions. The following activities were carried out: 1) Review of documents and archives of ASCH; 2) Survey of Knowledge, Practices and Coverage in the community (KPC); 3) Census of quality of health services; 4) Interviews of groups and individuals; 5) Presentation of results, The KPC survey was carried out by ASCH staff during two weeks before the arrival of the outside team during August 1995. This activity was followed by two weeks in which the census of service quality and the group and individual interviews were carried out.

Review of Documents and Archives

The original project proposal, the detailed implementation plan, the annual report, and the baseline report were reviewed. Also, copies were obtained of monthly reports, information system forms, training curricula, educational materials, and other materials which had to be reviewed.

Survey of Knowledge, Practices and Coverage

Following the guidelines for this type of survey stipulated by Johns Hopkins University's Child Survival Support Program (CSSP), a survey by conglomerates was carried out in the three project impact areas. The results obtained apply globally, not individually, to the three impact areas. A brief description of the methodology and instruments used appears in Annex 2.

Census of Health Service Quality

Since it was necessary to determine service quality, a census of the quality of all the public health services which collaborate with the project was carried out. Because the two most critical interventions are for diarrhea and acute respiratory infections, the evaluation of quality focused on these two interventions. The census consisted of observing case management, inventory of supplies of the micropost, interviewing users and a questionnaire regarding knowledge of health staff. A brief description of the protocol, the instruments used and some results appear in Annex 3.

Groups and Individual Interviews

Interviews were conducted with different groups and individuals who participated in the project. Specifically, members of Boards, Integrated Development Committees (IDC) and other community organizations were interviewed, as well as groups of volunteer health workers, midwives and counselors for reproductive health. In some cases micropost and volunteer workers were visited. Mothers or other child caretakers were interviewed. MSP health staff who collaborate with the project or receive referrals were interviewed as well. Finally, ASCH community staff were interviewed. The instruments used to direct the inquiry appear in Annex 4 and the participants of each group or individuals interviewed appear in Annex 5.

Presentation of Results

Once some preliminary frequencies and intersections of survey data were obtained, ASCH invited different groups and individuals interested in the evaluation results to a meeting in Tegucigalpa. The list of participants appears in Annex 6. Using a participatory methodology, four groups were formed to discuss the evaluation results and to offer recommendations. The list of their recommendations appears in Annex 7.

Evaluation Team

The evaluation team was formed as suggested in the "Guidelines for the Midterm Evaluation of Child Survival IX Projects." An external consultant was contracted, provided by the BASICS project of the USAID Office of Health-Washington. The BASICS consultant was provided free of cost to ASCH. Staff from the central office of SC assisted as well as a team formed by ASCH personnel. The team consisted of:

Evaluation Coordinator

René Salgado/BASICS Project

For Save the Children:

acilitation Team

Mariano Planells
Karen LeBan (HQ)
Mario Niero
Rita Mejia
Rito Rodriguez
Luis Améndola
Carmen Weder (HQ)

Supervisory Team

Rosa Maria Mejía
Mirtha Morales
Norman Márquez
Delmy Euceda
Glenda Hemindez
Betulia Zelaya
Elizabeth Sanchez
Iris Mendoza
Luz Molina
Javier Casco

In addition to this team, support was provided by the directors of the three project offices in the impact areas and by staff of the health sector in each area. The agenda of activities of the evaluation team appears in Annex 8.

RESULTS

1. *Outcomes*

The project initiated activities in the three working areas in October, 1993. Training for each intervention has been completed gradually since the project began. Table 1 compares the objectives stipulated in the detailed implementation plan and the midterm survey. It also contains **some** comments regarding data and/or the current status of that activity or indicator. Likewise, Table 2 compares the indicators found in the baseline with those of the midterm evaluation.

Table 1
ASCH CHILD SURVIVAL IX MIDTERM EVALUATION
OUTCOME BY OBJECTIVES and
INDICATORS STIPULATED IN THE DETAILED IMPLEMENTATION PLAN

Objective	MTE Results	Method	Comments
IMMUNIZATION			• EPI Efforts are in accordance with plan
• Maintain and increase timeliness of complete immunization coverage of children under one (BCG, OPV3, DPT3, measles) at 90%	93%	KPC Survey	• Drop-Out Rate showed positive trend (13% baseline to 2% at midterm)
• Increase TT3 coverage of women of child-bearing age from 48% to 80%	77%	KPC Survey	
CONTROL OF DIARRHEAL DISEASES			• CDD needs additional emphasis
• Increase the use of ORS and home fluids from 42% to 70% during diarrhea1 episodes	54%	KPC Survey	
. Increase appropriate food intake from 47% to 70% during diarrhea1 episodes	50%	KPC Survey	• Continuation of liquids during diarrhea1 episodes showed a positive trend (59% baseline to 78% at midterm)
NUTRITION			
• Increase from 27% to 35% mothers that exclusively breastfeed their children under 6 months of age	57% under 4 months	KPC Survey	• Change objective to "from 32% to 70% mothers that exclusively breastfeed their children under 4 months of age" per global indicator
• Increase from 4 1% to 80% mothers who know that additional food should be given to a child at 6 months in addition to breast milk	52%	KPC Survey	• Practice showed a positive trend from (9% at baseline to 20% at midterm)

Table 1 Continued
ASCH CHILD SURVIVAL IX MIDTERM EVALUATION
OUTCOME BY OBJECTIVES and
INDICATORS STIPULATED IN THE DETAILED IMPLEMENTATION PLAN

Objective	MTE Results	Method	Comments
• Increase from 14% to 60% children under two who participate in a growth monitoring program 3 times per year	62%	KPC Survey	• Substitute Indicator used: Children who were weighed in the last 4 months
· 60% of children whose weight is monitored will maintain their tendency of normal growth			· According to ProMIS 49% of children weighed in the last 3 months maintain their tendency of normal growth
VITAMIN A			
· 60% of children under 5 years will receive 2 doses of Vitamin A per year			• 85% of children under 2 received 1 dose per KPC survey
· 80% of postpartum women will receive one 200,000 IU dose of Vitamin A within one month after delivery			• Data from ProMIS was not accessible at the time of the survey
MATERNAL HEALTH and FAMILY PLANNING			
• Contraceptive usage will increase from 30% to 40%	34%	KPC Survey	• Recalculation of baseline data shows 20% at baseline instead of 30%
· Increase # of pregnant women with 3 prenatal documented visits from 10% to 70%			· KPC Survey shows 20% for one or more visits
· 80% of high risk pregnant women will be referred and treated at the health center			• This data was not obtained in the KPC Survey
ACUTE RESPIRATORY INFECTIONS			• ARl needs additional emphasis
· increase from 55% to 75% mothers who seek appropriate treatment for children with ARl (hospital, health center, private doctor)	54%	KPC Survey	
· 75% of mothers with children under 2 will be able to recognize the signs and symptoms of ARI			The KPC Survey has no questions designed to evaluate this indicator
MALARIA			
• Increase from 45% to 70% mother's knowledge of transmission and prevention of malaria	65%	KPC Survey	• The majority of mothers knew that malaria is transmitted why mosquitoes

Table 1Continued
ASCH CHILD SURVIVAL IX MIDTERM EVALUATION
OUTCOME BY OBJECTIVES and
INDICATORS STIPULATED IN THE DETAILED IMPLEMENTATION PLAN

Obiective	MTE Results	Method	Comments
HIV/AIDS			· Perhaps this activity should be discontinued. These indicators should be defined more appropriately.
• Increase knowledge of 3 methods of transmission and 3 preventive behaviors from 45% to 70% among adult population		KPC Survey	· 19% of mothers knew at least 3 forms of transmission. However, 85% knew the form of transmission most relevant to them--the sexual form. • Almost half of the mothers knew that fidelity and condoms prevent the transmission of HIV.
• Increase by 10% over baseline the # of men reporting condom use			· In the midterm survey a prevalence of 10% was found in use of condoms. Its use was unknown in the baseline.
• Decrease by 10% over baseline the incidence (#) of STD cases reported at health clinics			· This data is not collected in any survey or information system.

Source: Midterm KPC Survey. ASCH. Tegucigalpa, Honduras. August 1995.

2. Effectiveness

Table 2
BASELINE AND MIDTERM KPC SURVEY RESULTS
CHILD SURVIVAL SUPPORT PROGRAM INDICATORS

		Baseline[1]			Midterm[2]		
#	Indicator	Numerator	Denominator	%	Numerator	Denominator	%
1	Initiation of breastfeeding within 8 hours of birth	233	301	77	237	300	79
2	Exclusive breastfeeding from birth up to four months	16	50	32	27	47	57
3	Infants fed complementary foods	5	57	9	11	54	20
4	Persistence of breastfeeding	13	33	39	14	33	42
5	Continued breastfeeding during diarrhea1 episode	67	83	81	49	55	91

[1] Source: Baseline Survey, ASCH, Tegucigalpa, Honduras. December 1993.
[2] Source: Midterm Survey, ASCH, Tegucigalpa, Honduras. August 1995.

Table 2 Continued
BASELINE AND MIDTERM KPC SURVEY RESULTS
CHILD SURVIVAL SUPPORT PROGRAM INDICATORS

		Baseline[3]			Midterm[4]		
#	Indicator	Numerator	Denominator	%	Numerator	Denominator	%
6	Continued fluids during diarrheal episode	50	85	59	45	58	78
7	Continued foods during diarrheal episode	39	82	48	27	54	50
8	ORT use	44	107	41	37	68	54
22	ORS use	36	107	34	29	68	43
23	SSS use	1	107	1	1	68	1.5
9	Mothers seeking medical treatment for child with acute lower respiratory infection	62	119	52	51	91	54
10	EPI access (by card)	133	139	96	135	142	95
11	EPI coverage (by card)	126	139	91	132	142	93
12	Measles coverage (by card)	125	139	90	130	142	92
13	Vaccination drop out rate	7	133	13	3	135	2
14	Possession of maternal card	45	300	15	59	300	20
15	Tetanus toxoid coverage (by card)	189	300	63	231	300	77
16	One or more prenatal visits (by card)	33	300	11	59	300	20
16	One or more prenatal visits (by self report)	200	300	73	264	300	88
17	Use of modern contraceptives	42	205	20	74	221	34
18	Mothers who know how to read and write	211	300	70	243	300	81

[3]Source: Baseline Survey, ASCH, Tegucigalpa, Honduras. December 1993.
[4]Source: Midterm Survey, ASCH, Tegucigalpa, Honduras. August 1995.

3. Relevance to Development

One of the strongest aspects of the project is the intense community participation in the child survival project activities. Community participation is manifested through volunteer staff, the formation of committees or boards and participation in specific project activities. Also, the community participates in other activities implemented by the project (education, community banks, family gardens, etc.). Because of this participation, the majority of the community knows ASCH either through the child survival project or through the other activities which it carries out. This integration obviously increases community access to ASCH activities. Furthermore, it makes the work in health more cost-effective since up to 25% of the salaries of promoters are covered by other ASCH development projects.

A revolving fund for pharmaceuticals has been implemented by the project in a number of communities. These revolving funds are called microposts. The microposts which are managed by specially trained volunteer staff, maintain a basic inventory of pharmaceuticals designed to solve the most frequent problems within the community that require medication. The medicines are sold at minimal cost with 5 or 10% added to cover transportation costs or other costs related with the management of the microposts. This strategy makes the pharmaceuticals accessible in terms of distance, time and cost.

Another activity which increases the ability of families to benefit from the child survival services is the use of radio. Through the radio in San Lorenzo and La Esperanza the project delivers a series of educational messages and announcements regarding child survival. Local radios provide 45 minute programs 3 or 4 times weekly. Although some of the programs are devoted to other development aspects of ASCH's programs, the majority are dedicated to child survival topics. Although this activity has not been evaluated, it can be expected that at a minimum some child caretakers have been informed on health topics and about the presence of ASCH in the area.

The training of volunteer staff has increased the response capability of the community. During one session with community members, an incident was narrated in which, at the request of the volunteer staff, the community was organized in order to transport a person suspected of having cholera.

4. Design and Implementation

4.1 Design

The project area remains the same as outlined in the Detailed Implementation Plan. The population numbers were adjusted to correspond to the census and family registration taken last year. The new population (from 5,013 families to a current total of 5,429 families) by impact area can be found in the Year One Annual Report.

Minor adjustments to the project were made to correspond to needs identified by community members. The majority of the changes have increased the number of community level changes; this was made possible through a change in the exchange rate which increased the value of the dollar. Key changes include:

- The number of community level volunteers have been increased. CHVs were increased from 66 to 75, MCH counselors from 59 to 63 and micropost volunteers from 17 to 25. In addition, 62 auxiliary volunteers, primarily adolescents, have been identified and trained by the CHVs. The project decided to work only with the current number of TBAs rather than train new TBAs. This reduced

the number of TBAs planned in the project from 70 to 49.

- The number of microposts or "village pharmacies" have been increased from 17 to 25, covering 50% of the rural communities, and five additional ones are planned for the urban area. Condoms have been added to the essential stock of the micropost.

- Training in the construction of smokeless stoves was provided to CHVs, who in turn helped 53 mothers construct them. The smokeless stove project is linked with ARI education and prevention, and in addition provides some income to the CHV who can sell **her** consulting services in her community.

- The project has attracted additional funding in the maternal health care component from other funding sources. MSP staff are being trained in maternal health protocols and they, in turn, are training operational staff at the project level in new algorithms.

4.2 Information Management and Use

ASCH's information system is in a transition period. It consists of two parallel systems which gather and process data. First, there is a manual system which has been developed from experience acquired under the Child Survival III project. It will be described **later** on; second, it has a computerized data base which is a version of the Program Management Information System (ProMIS), created by the central office of Save the Children.

Manual System

The manual system gathers information principally at the community level and **it** is completely functional at all levels. By means of a family register information is collected regarding the composition of the family, ages, immunizations, training received. Similarly, some data is gathered about the structure of the home, family participation in community activities and some other data. To keep this information up-to-date instruments are used which capture important changes in the family or community. For example, a "roster" is utilized in which all the **data** from the family register is recorded and which is used to keep current the monitoring of weight, immunizations, training received, pregnancies and deliveries. Other forms are used to report vital events such as deaths, births and migrations. Still other instruments serve to consolidate the information and create reports. Table 3 shows the principal forms which are used, the type of information which is gathered and the person responsible for collecting it. Some of the system forms appear in Annex 9.

Table 3
Information System Forms

Form	Data Collected	Staff Responsible
1. Family Register	General Family Data	Volunteer
2. Roster	Weight Monitoring Immunizations Talks received	Volunteer
3. Vital Events		
- Pregnancy/Delivery Report	Data regarding pregnancy and risk factors	Volunteer
	Characteristics of the delivery	Volunteer
- Death Report	Deaths reported in the community	Volunteer
- Cause of Death	Possible cause of death	Promoter
- Migration Report	Immigrations and emigrations	Volunteer
4. Consolidated Reports of the Volunteer/Counselor	Home visits and health talks Referrals by intervention Data about users	Volunteer
5. Consolidated Report of the Promoter	Consolidated from summaries of all volunteer staff (using family registers, rosters, etc.)	Promoter
6. Sketch of the Community	Location of homes	Volunteer

Source: ASCH's Information System Tegucigalpa, Honduras. August 1995

Vital statistics are divided into four main events: pregnancies, births, deaths and migration. These data are used to readjust the size and characteristics of the population with which the project works. The reports of pregnancy, births and migration were all reviewed and were found to contain relevant and adequate information. Information is gathered which can be used to assign risk and to put into motion preventive actions. The other event, death reporting and investigation of death, constitutes a community system of vigilance. Once volunteer staff report that a death has occurred, the promoter carries out an investigation of the cause of death using a specially designed instrument. Study and discussion of mortality in the community and in the health services has indicated that it can be very useful in order to maintain the quality of interventions and to refine them. In the case of ASCH's reports of death the data collected could lead to erroneous conclusions. Very few questions are asked and in the opinion of the authors these are not sufficient to determine the cause of death. Neither have the sensitivity and specificity of the questions to determine an exact cause of death. Furthermore, the report is limited to identifying the biological cause of death. Social or behavioral events are not investigated (e.g. decision-making in the home, lack of economic resources, contact with provider of services, etc.) which precedes

the death. Finally, although this information is gathered, there seems to be no discussion within ASCH, with the community or with the MSP as to what this signifies or what can be done to improve it.

Although it was impossible to evaluate exactly the time that it takes staff to obtain, consolidate and report all the information, it was possible to verify that maintenance of the information system is one of the central tasks related to the project. In interviews with volunteers it was reported that, on average, two hours were required every three days to make home visits and bring databases up to date. Despite this time-consuming system, volunteer staff and promoters stated that this was not a big problem to them. In fact, both ASCH and MSP staff state that the collection and maintenance of information is a critical activity of the project.

ProMIS

The ProMIS system is a computerized version of the manual system. Using lessons learned in child survival, central office staff of Save the Children developed a computerized version. The system does not require extra forms; it utilizes those already existing. The main benefit of ProMIS is that it standardizes the reports which it generates, and, of course, it generates them at greater speed than the manual system. The central office of Save the Children has delivered the software to ASCH, has helped in its installation and has trained staff in its use. In addition to serving ASCH for its internal monitoring, ProMIS seems to have received attention from the MSP since it has occasionally requested data generated by ProMIS and has even requested the installation of ProMIS in the MSP offices.

Generally ProMIS is managed by the promoters in charge of the health sector in each one of the impact areas. Using the rosters and summaries of volunteers and counselors, the system is updated regularly. It was verified that the majority of persons responsible for the introduction of data (health sector promoters) knew how to use ProMIS adequately.

Nevertheless, and despite the efforts of the staff, at the time of the evaluation not all the ProMIS system was current and there were some problems in generating some reports. Since its installation in March 1995, the staff in charge have worked to enter the data. Due to the quantity of data which must be entered --several thousand files-- it is not surprising that the entry of data has not been completed. Staff have prioritized which data to enter first (roster, vital events, immunizations, etc.). A problem of great concern is that there have been difficulties in generating reports. The reports pre-defined by ProMIS are not sufficient to cover all reporting needs. Staff were not adequately trained in the more specialized functions of ProMIS nor in the exportation of databases to other software (such as EPI Info or dBASE) to analyze and generate reports. Consequently, some reports have not been produced (e.g., Coverage of TT3).

Use of Information

Although there are some examples of adequate utilization of information, there did not seem to be a systematic use or research of the information which the databases or ProMIS contain. Almost no volunteer stated having used the information which she generated. Although some volunteers have shared some information with the community or with the Integrated Development Committees (IDC), it was rare to find specific examples of how the information had been used in decision making. As to information flow to organized community groups, very rarely did a IDC or Board report that they had received some report regarding the health of their community and even more rarely that organized groups had made decisions based on this information. Although there seems to be coordination of concrete activities within the project and the MSP, the flow of reports in a systematic fashion to the MSP

is minimal. With some exceptions, MSP staff reported not having routinely received or analyzed reports from ASCH, and therefore it was very rare to find that project information was used in decision-making by MSP. In some cases there were examples of specific requests for information from MSP. Apparently in those cases the information was delivered in a timely fashion and decisions were made based on that information.

Another issue of concern is that there is no information flow from MSP to the project. In none of the impact areas was it possible to find reports generated by the MSP. If the project does gather information on mortality in the community, there is no way to know the structure of morbidity in the community routinely unless MSP provides it. Usually this information is only available in the MSP statistics. This information is critical to ASCH's elaboration of work plans.

Microposts

The micropost strategy requires the establishment of an information and storage system. At the time of the evaluation the micropost system is a very rudimentary one although it is effective to a certain extent. Two notebooks are kept: one for monitoring patients and another for monitoring medications. The patient record contains the name of the patient, age, reason for the consultation, medicine distributed and payment received. The medication record contains a list for each medication, but it was not possible to confirm in the field that an adequate record of inventory is maintained. In one of the impact areas no record of inventory at the project office level existed. Although the micropost patient record provides a good portrait of community morbidity, no analysis nor use of this information was found. Although not directly related to the information system, no study was found of what happens with the cases seen in the microposts. Is the care received from the staff of the micropost or the volunteer adequate? One must consider that, although the micropost responds to the felt and real needs of the community, in some instances it might be serving as an obstacle to adequate care by delaying search for care by hours or days.

Cost

Although a good part of the effort involved in the information system occurs at the community level, the costs required to print all the paper work of the information system can not be ignored. It is common knowledge that the ministries of public health frequently lack printed materials. If the information system is going to survive transference to the MSP, the human effort and costs of paper which the present system causes must be studied carefully.

Other

In addition to the routine information system, the project carries out a series of special research. For example, the project carries out surveys of volunteer staff and of the community utilizing modified KPC questionnaires for annual internal evaluations. The information collected is analyzed by the operations and management staff of the project.

4.3 Community Education and Social Promotion

The main activity of community education and promotion is home visits and community talks. The job description of volunteer workers indicates that it is necessary to make home visits and to give talks to the community. Table 4 shows the number of persons reached through these visits and talks since the beginning of the project. It is difficult to break down the information according to families reached. In spite of this production there exists no protocol with the exception of the KPC survey to determine if the talks have achieved the objective of adequately transferring knowledge and/or skills (e.g., preparing the ORS). No protocol exists for a home visit or as to how to structure a talk to ensure the standardization of the messages. Volunteer staff learn how to carry out visits and how to give talks by observing the promoter. During meetings with volunteer staff, it was reported that there are no educational materials for any child survival interventions and that rarely is printed matter distributed to the community.

With the exception of the materials for reproductive health, the project has no educational materials or materials of their own for promotion for any of their interventions. Usually MSP educational materials are utilized. Consequently, the project has not tested the materials nor the messages in the communities. Neither focus groups nor other ethnographic techniques have been implemented to test messages, however the technical staff reported that some data from the KPC surveys have been used to modify educational messages. Although the project has no list of educational messages (except for reproductive health), there are available principal messages in the curricula developed for training volunteer staff. During interviews with volunteer groups and with volunteers in the field it was confirmed that the majority knew the principal educational messages very well.

Another important social promotion activity is the use of radio, especially in rural communities. As was mentioned previously, radio programs are provided three or four times each week in the communities of San Lorenzo and La Esperanza. During 45 minutes to 1 hour topics in child survival or other aspects of primary health care are touched upon. This activity --not paid for by the project-- reinforces the community education activities carried out by the volunteers. Although this activity has been going on for 6 or 7 years, there has been no known evaluation of its impact. Neither were any prepared guidelines or standardized messages about child survival found. In the opinion of the technical project staff, radio has been especially useful to spread messages about AIDS/HIV.

Another educational activity in the community is the use of videos. ASCH has a good VCR with approximately 45 titles. The videos are shown to groups in the community. It was not possible to break down the talks for which videos were utilized. Neither were there evaluations regarding the use of this methodology in the community.

Table 4
Audience Reached through Health Talks in the Community

Topic	La Esperanza	Tegucigalpa	San Lorenzo
Diarrhea1 Illness	164		221
ARI	343		93
Nutrition	76	705	
Breastfeeding	57		
Nutrition, pregnancy and lactation	13		
EPI	24	705	
HIV/AIDS	117	49	
Reproductive Health/ Maternal Health	154	705	
Growth and Development Monitoring	63		
Basic Hygiene	125		
Dengue/Malaria		15	
Improved Stove		4	
TOTALS	1136	2183	314

Source: Consolidated Training and Management Reports. Tegucigalpa, Honduras, August 1995.

Another methodology used for social promotion is the portable and in-vehicle loudspeaker. Although this activity is not educational, the response obtained from announcements through this medium have been reported as good. It has been used primarily for vaccination campaigns.

Selected Results from the Knowledge, Practices and Coverage Survey

The interval between the baseline survey and the midterm survey is too short (18 months) to reach definitive conclusions regarding the progress of the program. However, the fact that the majority of the results demonstrate analogous levels between the baseline and the midterm, or in some cases even show positive trends, at least allow one to assume that the health situation has not deteriorated.

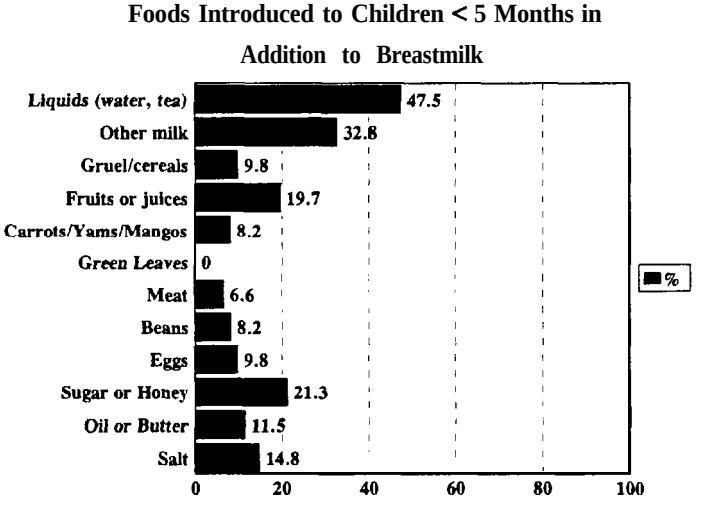
Due to the methodology utilized to carry out the surveys, it is impossible to make observations about any of the impact areas in particular. In accordance with the methodology of thirty conglomerates, the three impact areas were considered as only one homogeneous area. Consequently, the observations made below refer to the three areas as a group. Interpretation by area is not significant. This agglomeration of areas would be appropriate if the three areas were sufficiently similar. Unfortunately, problems in the urban area (Tegucigalpa) are very different from those of the two rural areas (La Esperanza/San Lorenzo) where the project operates. On the other hand, the geographical, climate, cultural and health situation in La Esperanza is considerably different from that of the other rural area in San Lorenzo. While the climate of La Esperanza is temperate, San Lorenzo is hot during most of the year. While the population of La Esperanza is largely Lenca Indian, in San Lorenzo and Tegucigalpa the population is mestizo. These differences mask the final results a little in the same way that surveys at the national level mask specific data for the regions surveyed.

Project indicators and indicators recommended by the Child Survival Support Program (CSSP) of Johns Hopkins University appear in the "Outcomes" section at the beginning of this document. Some interesting frequencies and intersections appear below. To present the results the denominator usually will be the total of those surveyed (mothers of children under 2 years) while the numerator will be indicated by the question which is being answered. For the CSSP indicators the operating definitions appear in the Survey Manual.

Breastfeeding and Nutrition

The operating definition of this indicator is different from that found in the project documents and those recommended by CSSP. The project indicator applies to children under 6 months while the CSSP indicator is for children under 4 months. Even so the trend (see Table 2) is positive and an increase was found in exclusive breastfeeding from 32% in the base line to 57% in the midterm survey. The foods most frequently introduced to children under 5 months who were nursing at the time of the survey appear in Figure 1. As can be observed, the major problem in continuing exclusive lactation is the introduction of liquids and other milks. The same group of mothers who both nursed children under 5 months and who had introduced foods believed (57.3%) that additional foods should be introduced before 5 months. It is impossible to break down the information to find out at what ages which foods are introduced. Neither is it known in what form the new foods are offered --especially liquids and other milks.

Figure 1



Source: Mid-term Survey, ASCH. Tegucigalpa, Honduras 8/95.

Athough a good ratio of mothers know that it is necessary to introduce foods at 6 months (an average of 52%), most mothers --lactating and others-- state that foods should be introduced before 4 months (Figure 2). This knowledge is evidently inappropriate.

Growth and Development

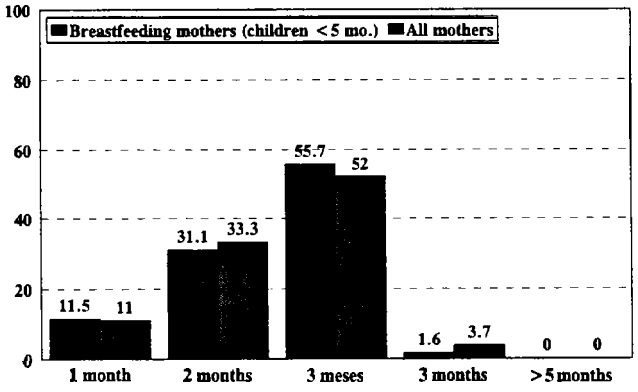
The majority of children under 2 years have growth and development cards; 8 1% of the children had this card. Only 1% reported not having them and the rest said that they had not picked up the card or did not remember if they had it. Generally, children under 6 months made up the majority of children who had no card. By 12 months almost all the children had a card. The indicator recommended by CSSP of children weighed in the last four months reached 62% (children weighed in the last four months/children with card). It was not possible to confirm the data about malnutrition because entry of the records into ProMIS had not been completed.

Vitamin A

Few mothers (32%) knew that Vitamin A can prevent blindness --even though the question is worded in a form which leads to an answer and it is one of the most important messages of the communication strategy. Even so, 85% of children under 2 years had received at least one dose of Vitamin A at the time of the survey. This discrepancy between knowledge and behavior --usually presented in reverse-- is of great interest because it would seem to indicate that the mother is willing to accept an intervention without completely understanding it.

Figure 2

Knowledge About Introducing Foods by Age



Source: Mid-term Survey. ASCH. Tegucigalpa, Honduras 8/95.

Diarrhea

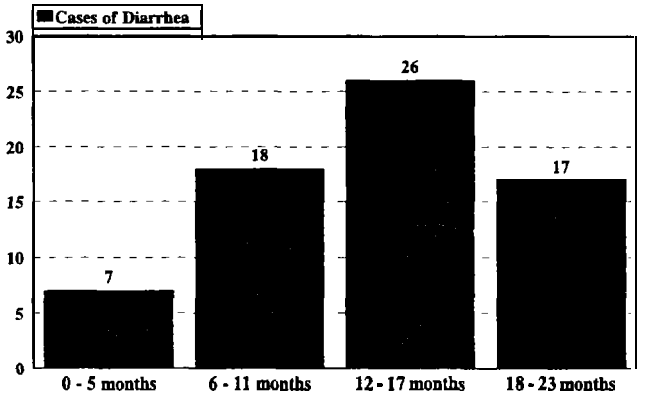
Twenty-three percent (68) of the children were described as having suffered diarrhea in the last two weeks. As shown in Figure 3, the majority of cases of diarrhea were reported in groups older than 6 months. This last finding replicates the incidence of diarrhea reported in the international literature for developing countries. Sixty-five percent of the cases of diarrhea occurred in families in which the mother was 25 years of age or less. However, the level of literacy did not seem to affect the incidence of diarrhea. In 52% of the cases of diarrhea help was sought outside the home. Of the 43 cases in which help was sought outside the home, the majority sought it from volunteer workers (16), from relatives (13) and from health centers (9). Eight persons sought help in more than one place. These findings regarding search for help indicate the importance of the volunteer health workers as sources of information and treatment --at least for diarrhea. No statistical relation was found between the age of the mother or her level of literacy and the search for help outside the home. It might be worthwhile to research in the future what signs or symptoms motivated the mother to seek help and the quality of the service she received.

As was previously described, significant increases were also found between the baseline and the midterm evaluation regarding the continuation of breastfeeding during diarrhea, continuation of liquids during diarrhea and continuation of food during diarrhea. The use of oral rehydration therapy and the use of rehydration salts also increased slightly compared to the baseline.

Figure 3

Distribution of Diarrhea Cases by Age

II = 68



Source: Mid-term Survey, ASCH, Tegucigalpa, Honduras 8/95.

Acute Respiratory Infections (AN)

Due to some difficulties in entering the data in the ARI section, only 225 surveys out of a total of 300 could be analyzed. Consequently, the results of this section should be interpreted carefully.

Thirty percent of the mothers reported that their baby had had a cough or respiratory difficulty in the two weeks before the survey. This percentage is very much above the prevalence of rapid breathing which is normally found in developing countries, which is usually between 15 and 20 percent of the population under 5 years. Of the total of children (95) who, according to their mothers had respiratory difficulty, the majority (77) sought help outside the home. The places most favored in terms of seeking help were the health center (34%), volunteer worker (20%) and relatives (13%). Oddly, few persons mentioned private pharmacies. Neither were the microposts mentioned. The mothers sought help in the places mentioned primarily because of convenience and trust. Very few mothers mentioned that cost was an important factor in their decision. Fifty of the 77 mothers who sought help outside the home received some medication. Of the same total (77), 34 mothers received an antibiotic for the problem. In terms of the ingestion of liquids, nearly 60% of those who sought help gave as much liquid as usual or more than usual.

Finally, regarding ARIs, the principal signs of danger identified by the mothers which motivates them to seek help outside the home were respiratory difficulty and rapid breathing. Coughing and the presence of fever also alarms them.

Expanded Program on Immunization (EPI)

Table 2 shows that in general EPI is in excellent condition. However, it should be pointed out that since the baseline, the different EPI indicators were already showing good results. Therefore it is impossible to attribute the findings to the project interventions. However, some changes have been achieved in the drop-out rate (it has been reduced from 13 to 2%), and the coverage of tetanus toxoid has also increased slightly from 63 to 77%. Another possible program success is the finding that 94% of children had a

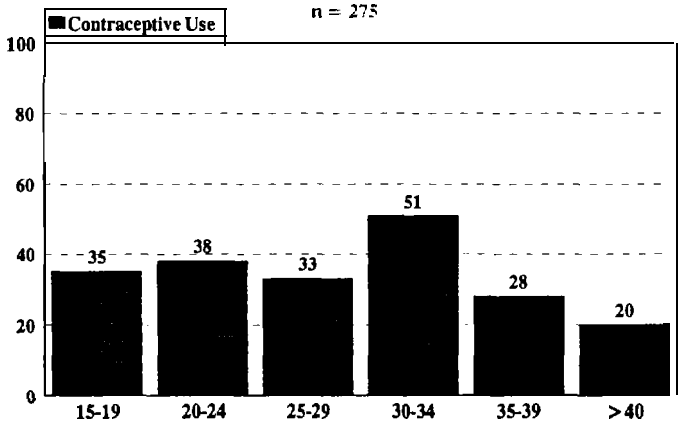
vaccination card. The majority of those who had no card were either children under one month or were older than 18 months.

Reproductive Health

Only 25 (8%) mothers of the total of 300 who were interviewed reported being pregnant at the time of the interview. Of the 275 mothers who reported that they were not pregnant, nearly 72% reported being satisfied with their number of births, at least for the next two years. This finding of satisfaction was particularly important for women over 30 years. The great majority of the women who responded that they wished to have children in the next two years were under 30 years of age (5 1 of 54).

Figure 4

Percentage of Women Using Contraception by Age Group

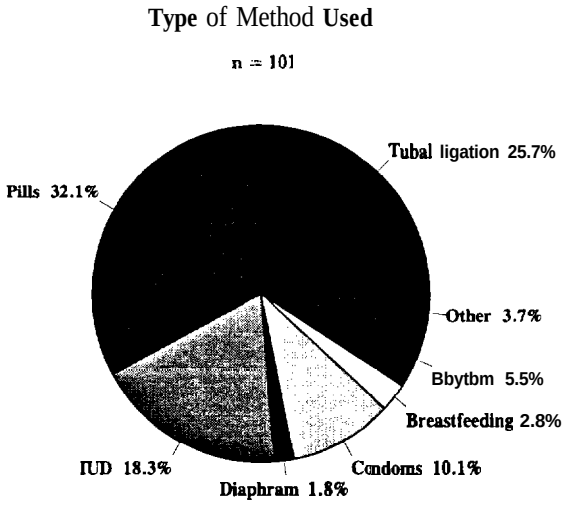


Source: Mid-Term Survey. ASCH, Tegucigalpa. Honduras 8/95.

Regarding the number of children which they wished to have, the mothers reported that an average of 3.9 children was ideal (median 3.0) (n = 274). In general, mothers under 25 years reported a higher ideal number of children than women over 25 years. The ideal interval between births was reported as 36 months (median).

As shown in Table 2 the use of modem contraceptives increased from 20% in the baseline to 34% in the midterm survey. The breakdown by age group is shown in Figure 4. Greater use of contraceptives is found among the groups under 35 years. Figure 5 shows the type of modem contraceptive utilized by 10 1 women who were using a method at the time of the survey. Approximately 8 persons were using two methods. It was confirmed that no case of vasectomy existed. Likewise, the lactational amenorrhea method is used relatively little. Neither was any case reported of use of introduction of hormones (injections). When separated by age group, younger women (under 25 years) tend to prefer pills and IUDs, while women in older groups prefer tubal ligation.

Figure 5



Source: Mid-term Survey, ASCH, Tegucigalpa, Honduras 8/95.

An encouraging situation was found regarding the intention of using a contraceptive method among the women who reported not using a method at the time of the interview. Seventy-three percent (n = 198) of the women responded that they planned to use a method in the immediate future. This same group of women reported that the principal reasons for not using a contraceptive method were because they were in a post-partum period or that they did not have a partner. In third place in regard to the reason for not using a contraceptive method was the lack of information regarding methods (14 of 189). No difficulties of access were reported, either because of the cost or access to an appropriate source. Ninety-two percent of all the women (n = 300) reported not having any objection to the use of contraceptive methods.

The majority of indicators referring to prenatal care and tetanus toxoid coverage increased in respect to the baseline. Table 2 shows that tetanus toxoid coverage increased from 63 to 77%; at the same time, prenatal visits increased (by self-reporting) from 73 to 88%. Of all the women who were not pregnant (n = 275) at **the** time of the interview, the majority sought prenatal care during their previous pregnancy from CESAMOs (50%), CESAR (19%) and midwives (14.9%). When the mothers (n = 268) were asked how many prenatal visits they had during their last pregnancy, they reported 5 (median). Approximately 66% of the mothers reported that their last delivery (n = 330) had lasted less than 12 hours, and 96% reported no complication during the delivery.

Human Immunodejkiency Virus (HIV/Acquired Immunodefciency Syndrome (AIDS)

In regard to knowledge about HIV and AIDS the results indicate that knowledge is still very much below the objectives stipulated in the detailed implementation plan. Only 19% of mothers knew three forms of transmission of HIV. However, the important avenue of transmission for them (sexual) was known by 85%. One third of the mothers knew **that** HIV is also transmitted by blood transfusions or by contaminated needles. The avenue of transmission least known was by way of the placenta.

As with the results regarding the methods of transmission, the percentage of individuals who knew at least three ways to prevent the transmission of HIV was minimal --fewer than 1%. Nevertheless, almost one half of the mothers knew that fidelity and the use of a condom are efficient behaviors in preventing the transmission of HIV. It may be **necessary** to review the indicators of the HIV/AIDS program.

Tuberculosis

The majority of the mothers reported knowing what tuberculosis was, and what were the principal symptoms. Fifty-seven percent of the mothers answered affirmatively the question of whether they knew what tuberculosis was. Nearly half (148/300) responded correctly that a cough lasting more than 15 days was a sign of possible tuberculosis. Even so, a significant percentage (136/300) responded that they knew no symptom of tuberculosis. Of the total number of mothers (300), 50% reported not knowing how tuberculosis is transmitted. The best known methods of transmission were by way of fomites (e.g. utensils) by 34% and drops of saliva by 29%.

Malaria

As **with** tuberculosis, knowledge was high regarding the way in which malaria is transmitted. Sixty-five percent of the mothers knew that malaria is transmitted by mosquito bites.

4.4 Human Resources for Child Survival

Mix of Staff and Volunteers

An organigram of the current project can be found in Annex 10.

Staff in the Central Office who provide overall supervision for the project include:

Managerial:	ASCH Director (part-time)
	Manager of ASCH Programs and Projects (part-time)
	Administrator (part-time)
	Accountant (full-time)
Technical:	Health, Population and Nutrition Coordinator (full-time)
	Nutritionist (full-time)

Support from current Tegucigalpa based staff, all of whom have been with the project since its inception, was considered to be sufficient according to field project staff. Computer support for overall programs and for the HIS was not found to be adequate.

Staff at the field level in each of the 3 project sites include:

Managerial:	Area Coordinator (part-time)
Technical:	Health Coordinator/Promoter (part-time)
Operational:	General Multi Sector Promoters
	Community Volunteers

Two of the three Health Coordinator/Promoters have changed since the Detailed Implementation Plan was submitted. Resumes of the new staff can be found in Annex 11. Five of the Multi-Sectoral

Promoters are nurses and have made contributed substantially to the project in terms of increased skill and knowledge levels.

Staff operate multiple projects simultaneously in several different sectors besides health. Staff work together as teams to provide integrated services in a geographic area while providing peer support to each other in technical areas (some of the promoters are specialists in areas of education, agriculture, etc.). Staff and the community were satisfied with the nature and intensity of their work.

The number and types of operational workers and volunteers participating in the project are found below:

Table 5
Type of Volunteer by Category and Impact Area
-Project Records, August I995

Category of Personnel	La Esperanza	Tegucigalpa	San Lorenzo	TOTAL
Community Health Volunteer	28	24	23	75
TBA	20	17	12	49
MCH Counselor	21	23	19	63
Micropost Volunteer	15	0 (5 planned)	10	25
Family Planning Volunteer	0	0	04	04
TOTAL VOLUNTEERS	84	64	68	216

Source: Project Archives. ASCH. August, 1995.

The primary outreach volunteers responsible for mortality surveillance, vital event reporting, health education and community mobilization are the community health volunteers. The CHVs are responsible for all project interventions. CHVs have also begun to train a new category of worker -- CHV auxiliaries. These workers are adolescents who are interested to serve their communities and to assist CHVs with data collection and growth monitoring of children under 2 years. As of August, 1995, there are 62 of these auxiliaries: 16 in La Esperanza and 46 in San Lorenzo. The maternal-child health counselors provide specific support to pregnant and lactating women.. The micropost and family planning volunteers are not obligated to do outreach work, but have "village pharmacies" set up in their homes where they provide counseling and health education. Several CHVs and MCH counselors also serve as micropost volunteers. TBAs respond to specific requests from families for their assistance.

Job descriptions were available for each type of worker. While CHVs knew major tasks of their job descriptions, they did not receive copies of them. Community members and the MSP staff knew the CHVs and their major roles; photographs of the CHVs were posted in the health clinics in a highly visible place. According to MSP staff, each CHV job descriptions vary by PVO and by the MSP.

There are twice as many volunteers in La Esperanza as compared to San Lorenzo and the urban area. According to project staff, it has been more difficult to attract volunteers in the urban area, especially

recently arrived families. The project has attempted to attract many volunteers in different capacities in order to promote a high level of community participation.

Community Volunteer Workload

Table 6
Number of Families Per Community Health Volunteer

	La Esperanza	Tegucigalpa	San Lorenzo	TOTAL
Total Population	7,519	11,179	10,081	28,779
Total Families	1,128	2,348	1,953	5,429
Total CHVs (including micropos volunteers)	43	24	33	100
Ratio Families/Volunteers	26	98	59	54

Source: Project Archives. August 1995.

As can be seen from Table 6, the workload of an urban volunteer is more than twice as great as a rural volunteer in La Esperanza. Even though houses are much closer together in the urban areas, both Dr. Oswaldo Guitarro and Melida Castellanos of the Alemania Health Post in Tegucigalpa suggested that either the number of urban volunteers should be increased or their workload decreased. Volunteers are viewed as an integral part of the MSP urban program which relies on information collected by them (e.g. family census, vital event reports) for planning of its public health program. CHVs did not complain about workload during interviews; however, if the project focuses more on increased quality of services, the ratio will need to be reviewed in each impact area.

Most of the volunteers interviewed were eager for additional training to increase their skill level. Many wanted to learn basic first aid and primary curative skills in order to respond to community needs, and to increase their own confidence in providing useful services. Several volunteers have multiple roles ranging from health to "village pharmacies" to other sectoral interventions.

Table 7
Turn-Over of Community Health Volunteers by Area and Gender

	La Esperanza			Tegucigalpa			San Lorenzo		
CHVs	F	M	Total	F	M	Total	F	M	Total
Total Active	29	55	84	64	0	64	60	8	68
Total Resigned	4	1	5	10	4	14	2	4	6
Total Trained	33	56	89	74	4	78	62	12	74
Turn-Over Ratio	12%	2%	6%	14%	100%	18%	3%	33%	8%

Source: Project Archives. August 1995.

The project has trained 24 1 Community Health Volunteers since the beginning of the project.

In La Esperanza, men are perceived as leaders and women do not often venture far from their homes without being accompanied by their husbands. For this reason there are more male than female CHVs. Some of the CHVs are couples. Both male and female volunteers felt well received by the community. CHV turn- over is considered to be very good, demonstrating the success to date of the CHV program.

In Tegucigalpa, many of the CHVs are single mothers, and many of these women consider themselves permanent residents of their communities. The male volunteers are generally young men under 20 years, who quickly leave when an economic opportunity presents itself. The turn-over of female CHVs is considered to be very low; many CHVs interviewed appreciate health and development training. Tum-over ratios vary in each colony; the highest occurring in the most recently settled area where migration is high, such as Villa Christina. CHV turn-over is lower in the more permanent settlement of Villa Franca.

In San Lorenzo, female CHVs are generally over thirty years of age and well established in their community. Male CHVs can more easily seek economic activities than their female counterparts, leaving them little time for volunteer activities.

Written criteria for volunteer selection in each project area which demonstrates these lessons were not available.

Community Volunteer Training

The majority of project staff time has been spent on the development and implementation of training for community volunteers. A detailed summary of staff training in Year 2 (Year 1 staff training can be found in the Year One Annual Report), and the total number and types of training conducted by the project for volunteers and community members in each impact area can be found in Annex 13. The project has increased the number of trainings as envisioned in the Detailed Implementation Plan, and plans to continue at a more intensive level. Training on the information system and vital event reporting has been a focus of the project during its first 18 months. Volunteers have received at least basic training in all interventions.

Based on CHV interviews, level of knowledge appears to be satisfactory. Questions related to each intervention were quickly and correctly answered. Pre and post tests were used in some of the courses; the majority of courses used a post test only. Curriculums were available for each of the interventions. There were no protocols for conducting home visits or for giving "health talks". While participatory methodologies were used to train volunteers, the CHVs were not provided with tools or training to utilize varied and effective non-formal methodologies when working with groups. Methodologies used by CHVs to train their auxiliaries were not observed by the evaluation team.

Specific health messages for each intervention that were adapted for each impact area were not written. Current material incorporating the latest state-of-the-art ARI messages does not exist in the CHV curriculum. Practicums for ARI and CDD were not part of the standard training methodology, limiting potential for correct diagnosis, referral and management of ARIs in the community.

Specialized training for managing a micropost and prescribing medication was provided by PRODIM -- a local organization experienced in revolving pharmaceutical funds -- via UNICEF funds.

The project is currently utilizing the maternal care/family planning curriculum and messages that were submitted with the Year One Annual Report. The project plans to revise these during the coming year. ASCH produced a manual on integrated reproductive health care with the MSP, PAHO, WHO, UNFPA and PLAN in 1995 which is being used to train Ministry of Health staff. The manual is entitled "Manual on the Norms and Procedures for Integrated Attention for Women".

4.5 Equipment and Material for Local Staff

The area of provision of equipment and material is one of those most adequately managed by the project. Volunteer staff primarily receive documents from the information system (e.g., roster, reports of vital events, reports, etc.). The volunteers who were visited had all their material in order. Also, the majority of the microposts had medications for pneumonia and oral rehydration salts.

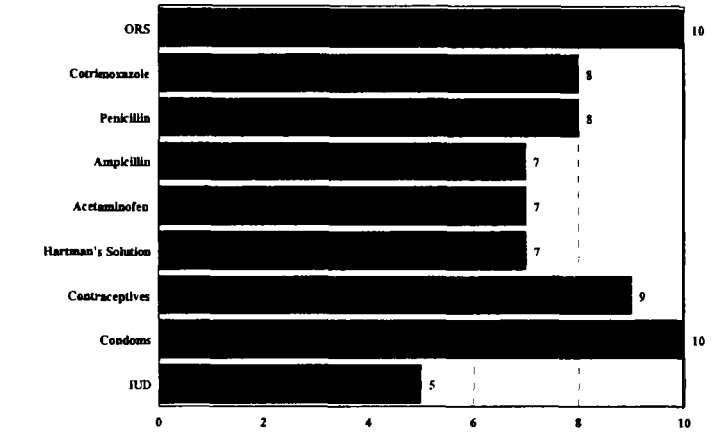
As part of the census regarding quality of services, the presence of supplies was reviewed in 10 referral centers utilized by the project. A supply was defined as present when it was available in any amount in the service facility. This operating definition was used to avoid complicated calculations as to exactly how much it was necessary to have in stock for a specific population with a specific epidemiology. Figures 6 and 7 show that the majority of services did have supplies to attend to the referrals made by the project. The majority of biological supplies for EPI were also available at the time of the census. It can be concluded that, in general, the services which receive referrals have available the majority of supplies necessary to provide quality care.

4.6 Quality

The project has documented the knowledge and skills of different audiences (mothers, health volunteer workers and health staff) since the initiation of the project. In the case of the mothers, the project has carried out a survey of knowledge, attitudes and coverage at the start of the project and during this midterm survey. Results of both surveys appear in Tables 1 and 2 at the beginning of this document. In general, the trends of the key indicators are good.

Figure 6

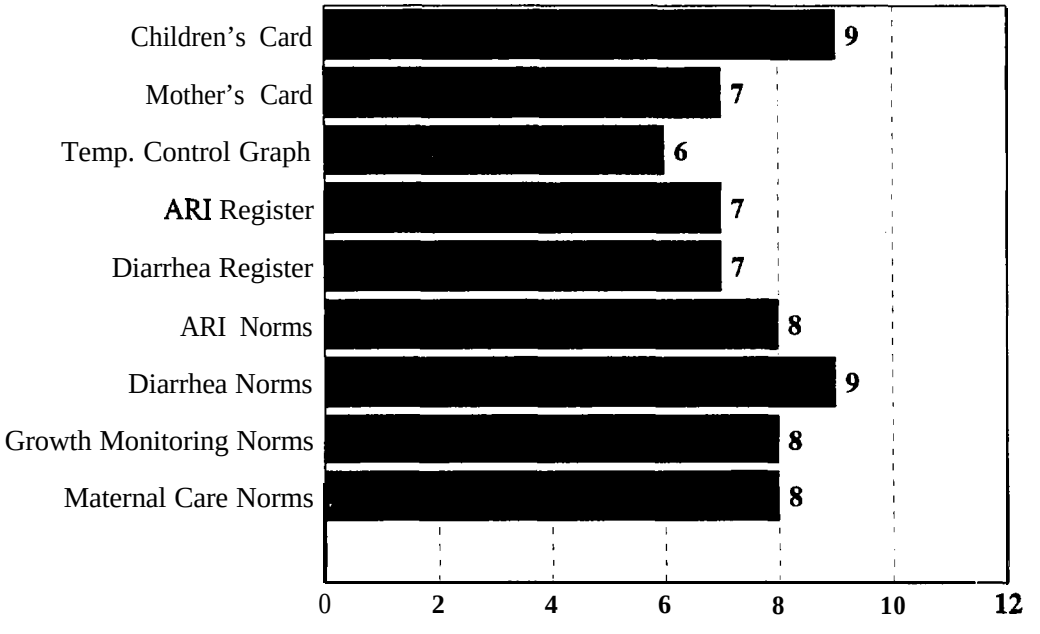
Drugs and Other Items Present in Service Facilities



Source: Quality of Health Services Survey. Tegucigalpa, Honduras 8/95.

Figure 7

Material Present in Service Facilities



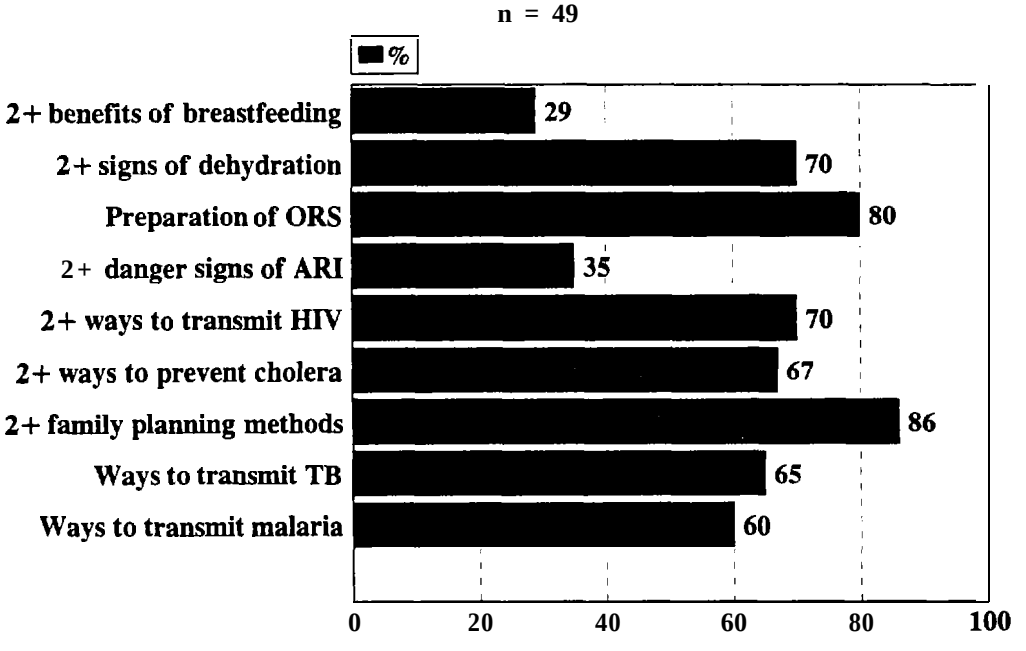
Source: Quality of Health Services Survey. Tegucigalpa, Honduras 8195.

In order to evaluate knowledge and practices of volunteer staff, the project has implemented two types of monitoring: (1) post-training evaluations; and, (2) internal evaluations consisting of surveys of knowledge and behaviors. The post-training evaluations are satisfactory. The surveys on knowledge and practices are carried out with an instrument partly based on the KPC survey. The last evaluation of this type was carried out in June 1995 with satisfactory results. The questionnaire used for this evaluation appears in Annex 14. A random sample was carried out with volunteer staff; however, since it was not possible to discover the methodology or criteria utilized to make the selection, the results should be interpreted carefully. A summary of the principal results appears in Figure 6. The main problem is found in the area of acute respiratory infections and in knowledge about breastfeeding.

For health staff in referral institutions, a census was carried out regarding quality of health services which are the point of referral for project activities. All the centers and health posts to which the project makes referrals were included in the census. Likewise, all staff who attend children under 5 years were observed and interviewed. The census employed three instruments: (1) observation of management of cases of ARI and diarrhea; (2) questionnaire regarding knowledge of health staff; (3) inventory of supplies. All the instruments were adapted locally from instruments used by BASICS, the Aga Khan Foundation, the WHO Survey of Health Services and the PRICOR Thesaurus of Primary Care. Only the quality of care for ARI and diarrhea were selected for evaluation because these two illnesses are the principal ones in terms of morbidity and mortality in the impact areas. Annex 3 shows the instruments and definitions of indicators used.

Figure 8

Survey of Volunteers: Results of Principal Indicators



Source: Internal Project Evaluation, ASCH, Tegucigalpa, Honduras, 6/95.

Table 8
Principal Indicators of ARI Program Quality

Indicator	Numerator	Denominator	%
Health staff skilled in the standard treatment of cases of ARI	23	43	53
Health establishments with antibiotics available for the treatment of pneumonia	8	10	80
Health establishments which can provide standardized case management	10	10	100
Cases of ARI in which recall was conducted correctly	13	40	33
Cases of ARI in which physical examination was done correctly	9	40	23
Cases of ARI correctly evaluated	3	20	8
Cases of pneumonia which received standard treatment	6	20	30
Caretakers of children with ARI who received advice regarding home care	4	30	13
Cases other than pneumonia (cough or cold) seen at the service who received antibiotics	9	21	43
Cases of ARI who received non-indicated pharmaceuticals	10	40	25
Cases evaluated with an integrated pediatric focus	17	40	43
Health staff with adequate knowledge about ARI case classification	13	43	30
Health staff with adequate knowledge about ARI treatment	2	43	5
Health staff who know the basic advice regarding ARI management in the home	6	43	14

Source: Census of Quality of Health Services. ASCH. Tegucigalpa, Honduras. August 1995.

Table 9
Principal Indicators of CDD Program Quality

Indicator	Numerator	Denominator	%
Health staff skilled in the standard case management of diarrhea	24	43	56
Health establishments with availability of ORS	10	IO	100
Health establishments which can provide standard case treatment for diarrhea	10	10	100
Cases of diarrhea with correct recall	9	12	75
Cases of diarrhea with correct physical examination	8	12	67
Cases of diarrhea with correct classification of hydration status	12	12	100
Cases with correct classification of diarrhea	9	12	75
Cases of diarrhea which received inadequate antibiotics	0	12	0
Cases of diarrhea which received non-indicated pharmaceuticals	4	12	33
Cases of diarrhea in which the caretaker was correctly advised about adequate treatment of diarrhea in the home	1	12	8
Cases managed with an integrated pediatric focus	4	12	33
Health workers with adequate knowledge about recall in cases of diarrhea	30	43	68
Health workers with adequate knowledge about a physical examination in cases of diarrhea	30	43	68
Health workers with adequate knowledge about hydration	20	43	47
Health workers with adequate knowledge about intravenous hydration	7	43	16
Health workers **with** adequate knowledge about the use of antibiotics in diarrhea	36	43	84
Health workers who know how to manage diarrhea at home	30	43	68

Source: Census of Quality of Health Services. ASCH. Tegucigalpa, Honduras. August 1995.

Tables 8 and 9 show the principal indicators for quality of care suggested by WHO for the Survey of Health Services for ARI and Diarrhea. Ten health services were reviewed, 40 cases of ARI management and 12 cases of diarrhea management were observed and 43 health workers were questioned. It should be made clear that the project strategy did not involve training of MSP institutional staff. However, it was considered necessary to evaluate the quality of services since the project is based on the supposition that the referrals and demands generated by its interventions will be adequately attended by public health services.

As shown, although an important percentage of staff had been trained in the standardized case management of ARI and all the services had antibiotics for the treatment of pneumonia, serious deficiencies were found in the management of ARI. Although 100% of the health services were capable of offering standardized ARI case management (they have pharmaceuticals and at least one trained staff member), only 8% of the cases were correctly evaluated in accordance with the norms of the national program of ARI control. Only 13% of the mothers received appropriate messages about managing ARI in the home. In fact, only 14% of staff knew what messages to deliver to the mother. The abuse of antibiotics in cases other than pneumonia is important and was found in 43%.

In the case of diarrhea the quality of services is somewhat better than with ARI. One hundred percent of the services are capable of offering standardized case management for diarrhea. The main problems in quality were found to be deficient interpersonal communication and lack of knowledge about intravenous hydration. The latter problem is not very serious since none of the interviewed staff has as a responsibility the intravenous hydration of patients. However, although they had adequate knowledge to deliver educational messages appropriately, only 8% of staff adequately advised mothers about management of diarrhea at home.

4.7 Supervision and Monitoring

Another successful aspect of the project is the excellent supervision which is carried out at the community level. According to the volunteer workers who were visited and to the survey of volunteer staff, the majority of volunteers are visited at least once each week. This frequency of supervision is more than sufficient. Generally, the supervisory visit consists of review of the information system (e.g., roster, vital events, etc.). Occasionally, when the volunteer requests it, the supervisor assists with the home visits --especially in difficult cases when the mother refuses to receive or listen to the volunteer. This support is especially appreciated by the volunteers because, while this helps her directly in her community work, it also serves to increase her credibility in the community. The visits vary in length. Rarely does the supervisory visit last less than one hour, and in certain cases -- when there is some special activity-- it can last a whole day.

Table 10
Ratio of Volunteer Staff to ASCH Promoter

Type of Staff	La Esperanza	Tegucigalpa	San Lorenzo	TOTAL
Staff of ASCH: Multisectoral Promoters (not paid by the project)	11	8	6	25
Volunteers	84	64	68	216
Supervisory Ratio: # Volunteers/promoter	8	8	12	9

Source: Project Archives. August 1995.

ASCH promoters supervise three or four communities in each one of the two rural impact areas, and one colony in the urban area. The promoters supervise not only the volunteer health workers, but also volunteers in other sectors, for example: agriculture, economic development, water, education and sponsorship. The ratio of volunteers/supervisor is different in the two rural areas and must be studied in depth to evaluate the impact on project quality. However, in the opinion of the evaluators, the ratio is adequate but perhaps not sustainable by the MSP. In La Esperanza all micropost volunteers also function as health volunteers. The ratio of volunteers/supervisor is an important tool in planning for sustainability.

Despite the positive frequency of visits and the good ratio between volunteers and supervisors, the home visit does not have a standardized structure. Although all the promoters do supervise the information system, there is otherwise no standard as to how to carry out a supervisory visit. No check lists exist for a directed supervisory visit. Neither was a method found in the form to provide feedback or training during the supervision. Finally, there was no item regarding supervisory visits in the information system.

4.8 Regional and Headquarters Support

Administrative monitoring and technical support from the Regional Office in El Salvador and from the Headquarters has been appropriate and timely. Technical assistance has included visits from Karen LeBan, the H/P/N Manager during the DIP preparation and in August, 1994. Dr. Loren Galvao and the Regional Office assisted in the design and facilitation of a Regional Health Workshop in Honduras in September 1994. Ken Herman, Management Information Services Manager, provided technical assistance in ProMIS in February, 1995.

4.9 Use of Technical Assistance

A list of external technical support **assistance** for year one of the project can be found in the Year One Annual Report.

The following assistance has been received from October 1994 through August 1995:

- Dr. Mar-cello Castrillo, JHU LAC Regional Representative, and Dr. Larry Cassaza, World Vision, provided assistance in March 1995, during a Child Survival Workshop on Management Information Systems.

- Dr. Richard Vernon, Regional Deputy Director of the Population Council, provided assistance in developing IEC messages for maternal care/family planning in March 1995.

- Dr. Jose Ochoa, National Consultant for PAHO, and Dr. Mirta Ponce, the MSP Director of Maternal Care, provided assistance in the development of the manual on integrated reproductive health.

- Dr. Nora Giron, National Consultant for PAHO, and Dr. Janet Alonso, EEC Representative, provided technical assistance for training on micropost management.

- Dr. Carmen Miranda and Laura Loux, USAID/Honduras Population Office, provided assistance in family planning to all three impact areas.

Additional support for the ProMIS program will be required during the next few months. Staff have requested support in non-formal education training in order to improve the effectiveness of the community volunteers.

4.10 Assessment of Counterpart Relationships

The project coordinates with: the MSP (national, regional and local) for training, supervision and training material development; ASHONPLAFA for family planning community based distribution support and supplies; Population Council for maternal care and family planning message and material development and strengthening of service delivery; and the Child Survival PVO Network (ADRA, World Vision, International Eye Foundation, World Relief, Project HOPE, CARE, La Leche League) for inter-institutional project coordination.

ASCH was praised for its efforts at coordination based on interviews with MSP and PVO staff. ASCH has provided technical assistance on the HIS to ADRA and World Vision. ASCH staff have involved the MSP in project activities, training and planning; and, have shared information during several workshops that are listed in the training summary, Annex 13. MSP staff use data collected from CHVs, primarily census and vital event reports, to evaluate their targets. The MSP will not have the resources to take over supervision of volunteers, a primary component of the project. Job descriptions between MSP volunteers, called "guardianas de salud", differ from ASCH volunteers.

ASCH staff are well received by the community, as demonstrated by the large numbers of volunteers wanting to participate in the project. ASCH organizes integrated community development committees in each community, which are organized into a larger area directorate. These committees organize and plan community activities for several ASCH projects. ASCH promoters meet with their community committees once per month on average; some CHVs are members of the committee. CHVs do not give health talks to the committees. At the present time, the committees are not responsible for health supervisory activities. In fact, during the interviews, committees without a CHV as a member were not aware of their role as entities of sustainability and support for the CHVs.

4. I I Assessment of Referral System

The referral system is one of the most problematic areas of the project. Despite the fact that one of the basic suppositions of the project is that the MSP will **be** able to respond to the demand generated by interventions, at the time of the evaluation project staff knew very little about how referrals were functioning. An exception to this finding are referrals to the reproductive health clinic. In theory, the project has established the CESARs, CESAMOs and local hospitals as referral centers. Also in theory, the groups who provide services should also make cross-referrals to the project. Some volunteers have referral papers. In spite of this effort, volunteers explained that their referrals are frequently ignored by MSP personnel. This discourages them and causes them concern since their credibility within the community diminishes when their referrals are not attended or recognized by the MSP. No volunteer could remember **such** a cross-referral having been made.

On the other hand, in some impact areas MSP staff reported not having received any referral from the project. MSP staff stated that part of the problem of refusal of referrals was because these are made directly to hospitals. When data was sought regarding the number of referrals made by the project or the institutional service providers --a key indicator for the project-- none could be found.

4.12 PVO/NGO Networking

As mentioned earlier, ASCH participates in a network of PVOs/NGOs that implement child survival and reproductive health activities. Many of the PVOs have been able to better know each other's programs and to share experiences via the Johns Hopkins Child Survival Support Program's activities, Meetings between PVOs have also received support from USAID/Honduras. Because of the number of PVOs working **in** the Tegucigalpa area, there is high proximity of project areas. Different methodologies used by PVOs, especially in regards to volunteerism as opposed to paid community workers, and different job descriptions of CHVs limit overall progress. There are inter-institutional coordination meetings for the Tegucigalpa area between PVOs and the MSP; persons interviewed suggest these meetings be continued on a more frequent **basis.**

4.13 Budget Management

Please refer to Annex 15 for the Pipeline Analysis.

The project received a total of $504,468 (a reduction of 25% from the original proposal) divided between $75,670 for Headquarters support and $428,798 for services. The budget of the detailed implementation plan has not been modified. As of June 1995 approximately 58% of the total budget had been spent. The budget expense report through June 1995 indicates that 52% of the total grant was spent. There is a budget for each activity and for each area of the project.

A restructuring of the budget is expected for Year 3. The budget review will be coordinated between program and management. There are sufficient funds to carry **out** activities planned for Year 3. However, they must be spent carefully to avoid overexpenditure.

CSIX financial reports are prepared monthly consolidating information prepared by each impact area. Each impact area in which CSIX is implemented: La Esperanza, Tegucigalpa and San Lorenzo, send monthly reports of expenses accrued during the month to Tegucigalpa. This information is analyzed by the accountants to verify their accuracy and that the codes are being used in accordance with USAID regulations. Expenses are identified according to an accounting code indicated on each check. The check request is signed by two individuals: the Administrative Manager and the Impact Area Coordinator. The central office as well as the areas keep an auxiliary book which indicates budget and cost per activity. This book is updated manually.

ASCH maintains a separate account for CSIX in Tegucigalpa. The exchange rate is averaged monthly in accordance with the different exchange rates throughout the month. The profit in the exchange is reinvested for programs in CSIX.

It is recommended that in the future the check request should be approved by the person in charge of the program.

5.0 Sustainability

Two basic activities were carried out to evaluate the sustainability of the project: (1) community groups and the MSP were interviewed to learn their perception of sustainability and their role regarding it; (2) evaluation of objectives developed in the detailed implementation plan.

The community groups are still immature and possibly are not prepared for the responsibility which sustainability implies. Interviews with committees and boards of all communities revealed that they have very little awareness of what is expected from them once project funds end. ASCH has made a great effort to offer training on managerial and administrative matters for a community organization. This has been a great help but it is not sufficient. It is possible that the project will require an extension to help the community groups to mature.

Interviews with MSP health teams in impact areas revealed an uncertainty about their role within the project. When staff were questioned about what they expected to do when the project ends, the majority responded that it would be impossible for the MSP to maintain the rhythm and intensity of work provided by ASCH. They stated: "To make weekly visits to each one of the CHVs would be impossible." ASCH should make adjustments to the project to reach an appropriate rhythm of work which will fulfill the stipulated objectives and will simultaneously be acceptable to the MSP.

The following sustainability objectives were developed in the Detailed Implementation Plan.

Table 11
Sustainability Goals and Status

GOAL	END OF PROJECT OBJECTIVES	STEPS TAKEN TO DATE	MID-TERM MEASURE	STEPS NEEDED
47 Community Development Committees will coordinate health activities with other agencies, and select and supervise CHVs.	1) 47 Community Development Zommittees exist in each community and supervise CHVs. 2) 3 Regional Development Zommittees plan and coordinate integrated development and public health activities with MSP and other agencies.	1) Committees Formed in communities and nave selected CHVs. 2) 3 Regional Development Committees formed in each impact area.	I) Community Zommittees meet nonthly. 2) Regional Committees meet monthly.	1)Evaluate and revise current strategy. 2) Formalize supervisory relationship with CDCs. 3) Develop supervisory protocols for committees and train committee members.
Families will practice protective behaviors related to each of the project objectives.	1) Beneficial health practices of families increase.	1) CHVs trained. 2) Radio program in both rural areas has a weekly health program .	1)CHVs conduct l-3 home visits per day. 2) Radio program receives written responses to health topics.	1) Develop home visiting protocol to increase effectiveness of CHV. 2) Develop health strategy and clear messages for radio program. Evaluate effectiveness.
MSP will provide follow-up training and supervise volunteers with periodic visits to the community.	1) MSP will supervise 142 trained volunteers.	I) Volunteers are currently supervised by ASCH Promoters.	1) MSP has not agreed to take on supervisory responsibilities.	I) Develop supervisory plan with MSP and with communities to determine best institution for technical supervision and best institution for administrative supervision.
MSP will utilize a CHV referral system..	1) CHV referral system accepted and used by MSP.	1) CHV referral system established.	1) CHV referral system not functioning adequately.	1) Evaluate effectiveness of current referral system. 2) Modify system based on findings.

Table 1 1Continued
Sustainability Goals and Status

GOAL	END OF PROJECT OBJECTIVES	STEPS TAKEN TO DATE	MID-TERM MEASURE	STEPS NEEDED
MSP will supervise micro-health posts and ASHONPLAFA will supervise sale of contraceptives and supplement stock.	1) 17 micro-health posts functioning and replenishing stock with supervision by MSP. 2) ASHON-FLAFA provides family planning supplies, training and supervision.	1) 20 micro-health posts formed; materials and essential drugs provided; 5 new ones planned. 2) Relationship with ASHONFLAFA established; contraceptives added to micro-posts. 3) 4 family planning volunteers trained	1) Supervision, training, stock replacement, and fund management by ASCH. 2) Micro-posts respond to community need and used by community members.	1) Evaluate w-rent micro-post program. 2) Work with other agencies implementing microposts to establish plan for future supervision. (At this time it does not appear likely that MSP will be able to provide adequate future supervision).
Volunteers are highly motivated and willing to stay in their communities after project termination.	20% of volunteers in the 2 rural areas and 80% of volunteers in the urban area will belong to a community bank/credit fund	1) 1 volunteer in rural areas and 7 volunteers in urban areas trained and belong to a community bank. 2) 20 volunteers in 2 rural areas and 8 urban volunteers participate in other ASCH projects .	1) 1% volunteers in 2 rural areas and 11% urban volunteers belong to community bank 2) 13% volunteers in 2 rural areas and 13% urban volunteers participate in other projects.	1) Re-evaluate strategy with community development committees; change objective accordingly.

Source: Project Ai ives. ASCH. Tegucigalpa, Honduras. August 1995.

RECOMMENDATIONS

To make them more easily read, the recommendations have been broken down as follows: (1) general recommendations regarding the project; (2) specific recommendations regarding interventions or supporting sub-systems.

GENERAL

In general terms the project is on its way to accomplishing the objectives stipulated in the initial proposal and in the detailed implementation plan. The great majority of indicators are now above those found in the baseline survey, and in some cases (such as the objective of children participating in growth monitoring programs) they have already surpassed the final objective.

1. **Focus efforts.** Despite the good condition of the project, it will be necessary to make some adjustments which will mean, in some cases, important changes in the philosophy, structure and practice of the project. **In the first place, the project needs to focus its efforts.** Currently there are eight interventions (from HIV/AIDS to EPI). Because of the operational load which this means for the project, for the Ministry of Health and for the community, it is not realistic to believe that all the interventions can be sustained once project resources end. The directors of the project should consider which interventions are really necessary from the epidemiological point of view and from the point of view of their status at project start-up and midterm. For example, according to national statistics and the baseline survey, the Expanded Program of Immunization (EPI) was in excellent condition (9 1% coverage) at the initiation of the project. Why was this intervention maintained? The project should have then either discontinued or at least diminished its efforts in EPI ---which during certain periods such as national vaccination days consume a disproportionate amount of resources. Another area which deserves to be reconsidered is the HIV/AIDS programming. Although HIV/AIDS is a serious problem for the Honduran population --Honduras has the highest reported rate of HIV/AIDS in Central America-- the program does not have the human resources necessary to attack this problem seriously. In conclusion, project managers should create a list of criteria which will help them to evaluate each one of their interventions impartially. The list should include at least: epidemiology in the impact areas, relative importance of each one of the interventions, potential for maintenance by the community and the MSP, available resources for each intervention, etc. This focus of efforts should be carried out together with MSP counterparts, the community and other participating agencies.

One indirect benefit of reducing the number of interventions is that this would in turn reduce the current work load of the CHVs. Although the CHVs did not complain about the quantity of work, common sense and experience tells us that a work load such as the one this project imposes ends by being overwhelming for the volunteer.

One way to focus efforts might be to introduce also the WHO/PAHO initiative for Integrated Management of the Sick Child. This initiative integrates the vertical interventions of ARI, Diarrhea, EPI, Measles, Febrile Illnesses (Malaria) and Nutrition. ASCH could begin the process of incorporation during next year and be prepared with adequate materials for a new project in 1997.

2. Introduce a neonatal intervention. If ASCH desires to have an impact on child mortality it needs to introduce interventions which solve the neonatal problem. International literature increasingly

recognizes the importance of neonatal mortality as a component of child mortality. In general, in countries such as Honduras (with a child mortality between 40-50 per one thousand live births) approximately 30 to 40% of child mortality is due to neonatal mortality. Another important factor is that of the total of neonatal deaths, the greater ratio occurs during the first day of life. The logical conclusion is that reductions in child mortality necessarily require reductions in neonatal mortality. However, it is necessary to make the effort to document what is occurring in regard to neonatal mortality in the project areas and to design, if not for this project certainly for the following one, specific interventions to address the neonate.

3. The project requires more time (and possibly resources) to accomplish some objectives for sustainability. The funding agency should consider extending the time of intervention to achieve greater sustainability. The project has emphasized and has succeeded in completing a series of technical activities in each one of the interventions. Nevertheless, it will be necessary to extend funding by at least one year to consolidate some of the attainments in sustainability and to initiate work on some aspects of sustainability which have not yet been attempted.

SUPERVISION, MONITORING AND EVALUATION

1. Carry out surveys by area. Given the epidemiological, climate and cultural disparity of the three impact areas, taking samples of the three areas as if they were homogeneous makes separate interpretation of the data impossible. The directors must consider applying the survey in each impact area separately or at least breaking down the sample in order to interpret data from each area.

2. Standardize the supervision and evaluation of quality. Although supervision is one of the most relevant aspects of the project, even greater standardization in its implementation is required. The project should create supervisory guidelines and train all staff. Such guidelines should include check lists to review supplies, evaluate performance and review records. It should also contain instructions as to how to give feedback to volunteer staff in a standardized manner. Process indicators should be incorporated into the information system. To the extent possible there should be a periodic evaluation of the perception of the target population as to the quality of the services offered by the project.

3. Structure the home visit of the volunteer worker. As was mentioned previously, the home visits which the volunteer staff make to mothers in the community currently have no definite structure. Except for giving talks about health, the health worker does not have a clear idea as to other activities which could be carried out with the mother. In fact, the talks do not have clear objectives, a defined structure or methodology to evaluate them. The project must develop a protocol for the talk and the home visit.

4. Improve mortality surveillance. The mortality surveillance which the project carries out is an excellent activity which requires certain refinement. The protocol for making a diagnosis by verbal autopsy is not very sensitive. The project should review the bibliography on this and make appropriate modifications. In addition, the project should incorporate research of the events which preceded the death. It would be very useful to know, for example: Did the mother seek help? Where did she seek help? Why did she seek help there? What prevented her from seeking help? Was the help she received appropriate? Was she able to carry out the recommendations which were made to her? Why did she not carry them out? What was the nutritional or immunizational status of the child at death, etc. Also, the project should institute mechanisms to discuss and provide feedback to the different levels about the causes of death and the social events which led to that death. Finally, the surveillance of mortality, if it captures all deaths which occur in the community, can serve as an evaluation of project impact.

5. Institute monitoring of the quality of health services. The project, as presented in the original proposal, seeks primarily to generate a demand for health services. It is assumed that once the services are sought, the patient will receive adequate care. As could be seen in the census regarding quality, this is not necessarily true. The project should collaborate with the MSP in instituting mechanisms to monitor periodically the quality of care in the health services. Lists should be developed for monitoring performance, reviewing records and observing case management.. Likewise, mechanisms to deliver this feedback to services and MSP directors should be implemented.

6. Accelerate the entry of data to ProMIS and correct "software" problems. It is urgent to finish entering community information into ProMIS. Although heroic efforts were made on the part of ASCH staff to generate reports for this evaluation, practically no useful report was obtained. This is due in part to the fact that the program has some problems, partly by lack of experience in the use of ProMIS and partly because the entry of data had not been completed. ASCH should accelerate both the entry of data and training in using ProMIS. If possible, ASCH should assign resources to delegate solely one technician to attend and monitor any problems with ProMIS. On its part, SC's central office should help ASCH solve the technical problems which have come up which are inherent to programming software. Likewise, it should work with ASCH to design the reports which are most appropriate to project needs.

7. Homogenize project indicators with those of CSSP. Some indicators in the detailed implementation plan do not correspond appropriately with the CSSP indicators. These should be incorporated and standardized. On another issue, the instruments which were used for the baseline and midterm survey can not generate all the indicators stipulated in the DIP (e.g., high risk pregnancies detected, referred and treated). Some questions to obtain the numerators must be included.

8. Carry out more profound analysis from the information. The information generated from the KPC surveys, as well as the routine reports from ProMIS and from the manual system should be analyzed to try to identify risk factors. As previously mentioned regarding surveillance of mortality, some of the variables to be collected can be manipulated in different ways to identify risk factors (e.g., age, level of education, etc.). There are simple statistical tests which ASCH staff can learn in order to analyze two or more variables conjointly.

9. Develop a strategy to analyze information. Along with recommendations 4 and 8, the project should develop a contextual framework to analyze health problems in the community and in the services. A framework such as "On the Road to Survival" (Annex 17) could assist the project in informing itself and its counterparts in the community and in the MSP as to where the most important failures are to be found in the process of searching for health care. In this way the strategies can be prioritized better.

REFERRALS

1. Study the referral process. Although anecdotes exist regarding referrals made by the volunteer staff, it is not really known what happens afterward. The project must investigate if the referrals made by the volunteer staff actually reach the centers of referral and are adequately attended. The project should collaborate with the MSP to develop a system which would allow follow-up to referrals which arrive from the community. Indicators such as: "Percentage of referrals which were attended in a specific health service" or "Percentage of referrals who were hospitalized", etc. should be developed and be included in the information system. This information will be extremely useful to determine if project efforts to increase the demand for services are now effective.

2. Study the cause and effect of the Microposts and their referral process. During the evaluation it was verified that the microposts attend a great number of the community's health problems. But it was impossible to determine if those problems had been resolved or not. It is very important to evaluate the problem-solving capacity of the microposts. It is necessary to know if the problem which was presented at the micropost was accurately resolved or whether it only created an impediment to the search for more appropriate assistance. This activity could be carried out retrospectively by selecting a number of cases previously seen and revisiting them to investigate what happened after the visit to the micropost.

TRAINING

1. Standardize job descriptions and training of the CHVs with the MSP. As was mentioned, there are important differences between the curricula of MSP volunteer staff and volunteer staff from ASCH. To assure greater sustainability of the CHVs it is important to modify in some manner the curricula between the two types of workers (from MSP and from ASCH) in such a way that they will be indistinguishable.

2. Incorporate as much as possible some of the suggestions made by the CHVs regarding training. The CHVs have suggested more training in first aid, injections and treatment. The project should make an effort to provide this type of training to the CHVs. Even if it is true that volunteer staff have sufficient knowledge to attend the preventive needs of the community, the CHVs complain that when the community really needs them for emergency or curative actions they can do very little. Better training in treatment would transform the CHVs from a communicator of preventive actions into a real resource for the community. Of course, an adequate balance should not be lost between preventive and curative treatment.

3. The project should compile a list of selection criteria for volunteer workers. The appropriate selection and long-term retention of health workers is one of the most important lessons that the project must learn. It is important for the project to identify which variables (e.g., age, schooling, sex, etc.) are the most important in the selection of long-term, intensely dedicated CHVs.

SUSTAINABILITY

1. Accelerate the task of transferring responsibilities for the project to the MSP and the IDC or Boards. Of vital importance for the project, this area is one of the weakest. The project must work intensively in realigning its sustainability strategy. It is evident that various objectives cannot be met. It will be necessary to work with community organizations to familiarize them with the role and responsibilities which await them in the future. Also, the project should redouble its efforts with the MSP if the latter is going to be able to provide follow-up to the entire structure which has been developed within its impact areas.

A series of recommendations regarding sustainability appear in Table 11.

INFORMATION, EDUCATION AND COMMUNICATION

1. Emphasize behavioral change, in the mother as well as in the health services. The project must educate itself about methodologies to modify conduct. It does not appear to be sufficient to communicate educational messages to change certain behaviors; in certain cases it is necessary to understand clearly which are the barriers, incentives or consequences that the community or the health personal can invoke to influence behavior. At the time of the evaluation there was no assigned person within the project who was devoted to this field. Through a greater understanding of the history and consequences of the behavior, project staff will be able to design interventions to modify it.

2. Improve the development of educational and training materials. Linked to the previous recommendation, project staff should become trained in developing messages and educational materials appropriate to each of the audiences which they manage. Each and all of the behaviors which the project desires to modify and each message the project plans to transmit should be evaluated in terms of their correctness and feasibility within the community.

3. Develop and distribute educational materials for the use of the volunteer worker. At the time of the evaluation the volunteer staff had no educational materials for using in their talks to the community. Although the desire of the project not to introduce non-replicable materials to the community is understandable, it is necessary to provide the volunteer with a minimum of materials to give their talks. This recommendation goes hand in hand with the recommendation about developing a protocol for giving talks. Of course, the materials should be simple, practical, inexpensive, and easily duplicated in the community.

4. Improve and evaluate radio programming. Radio has been very important for communication activities, according to the project directors. Unfortunately, no evaluation of its impact exists. It would not be too difficult to introduce a few questions to the baseline questionnaire regarding sources of information. It will also be necessary to evaluate and, if necessary, improve the educational content of the radio programs.

RESEARCH

1. Develop a research agenda. Because of its structure and efficiency, ASCH has very special opportunities to carry out research in operations and health services. For example, the introduction of improved stoves presents the opportunity, if enough cases are available, to develop a research study to evaluate the impact of the reduction in particles of smoke in the incidence of acute respiratory infections --especially pneumonia. This type of study has the potential to contribute in an important manner to world knowledge about the prevention of ARI.

SPECIFIC INTERVENTIONS

ARI

1. Improve programming of the ARI Program. This is one of the weakest of the project. The project must redouble its efforts in this regard. On the national level data indicate that the principal causes of

mortality in those under two years -- the main audience of the project-- are pneumonia and diarrhea. Some specific aspects which should be improved are:

1.1 Improve ARI Program indicators. The project's current indicators are inappropriate. A consultation is recommended with the MSP and the WHO/PAHO documents to obtain them.

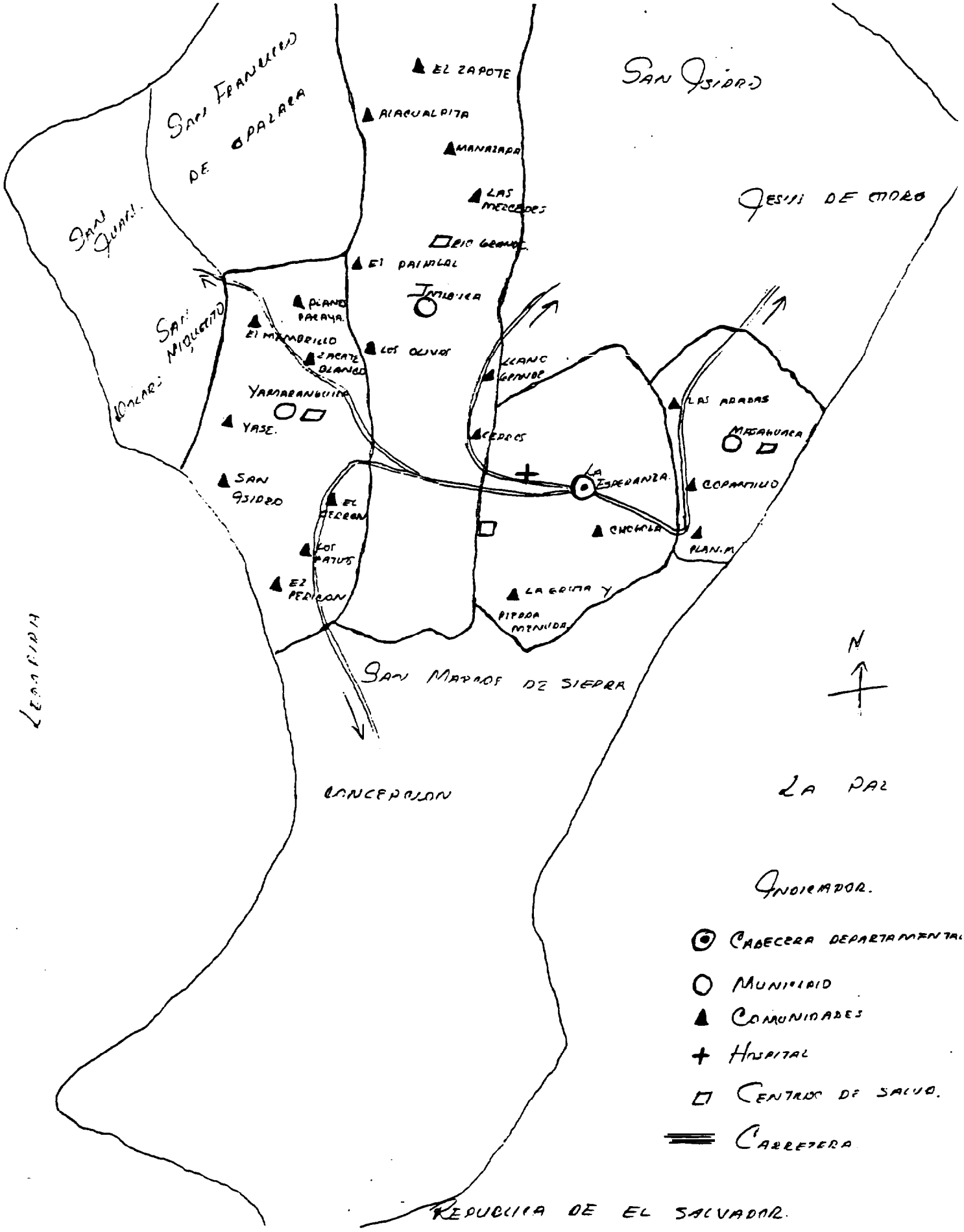
1.2 Improve training in ARI for the CHVs. For this it may be necessary to train operational staff first. The practical content of training for the CHVs must be increased. Some of the educational content (as described in the ARI curricula) should be modified.

1.3 Standardize reports by age groups relevant to ARI. Information systems of the project should be slightly modified to gather information about the age groups for the ARI algorithm (under 2 months, 2 months to 1 year and over 1 year) .

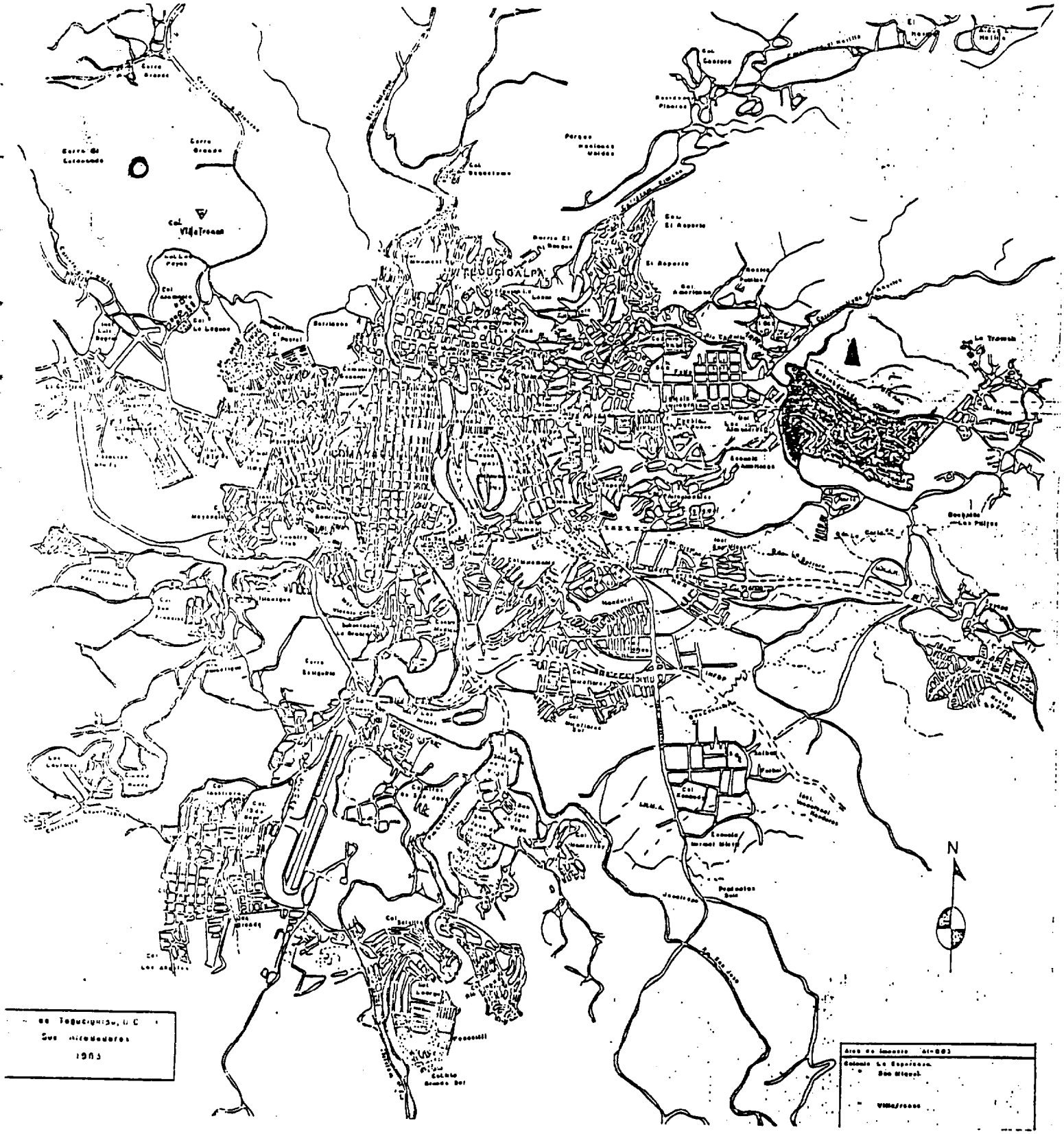
ANEXOS

Anexo 1
Mapas de Áreas de Impacto

ARE A DE IMPACTO 02, LA E SPERANZA, INTIBUCA



ARE A DE IMPACTO 03, TEGUCIGAL PA



Colonias Viejas:
La esperanza
San Miguel

Colonias Nuevas:
Buenas Nuevas
Alemania
Las Pavas
La Brasilia
Villafranca
San Juan de1 Norte
Villa Cristina